

## CLAIMS

1. Loudspeaker assembly, wherein the loudspeaker may be brought from a first non exposed position and into a second exposed position along an axis of movement, where the loudspeaker assembly comprises a transducer unit, means in the shape of for  
5 example motor means and optionally a gearbox for moving the loudspeaker from the first position to the second position and vice-versa, and a closure member for covering the loudspeaker in its first position.
2. Loudspeaker assembly according to claim 1, c h a r a c t e r i s e d in that the as-  
10 sembly includes an acoustic lens.
3. Loudspeaker assembly according to claim 1 or 2 c h a r a c t e r i s e d in that the means for moving the loudspeaker and/or the acoustical lens comprises one or more spindles which spindles in a first end are fastened to the transducer unit and/or the  
15 acoustic lens and in the other end is rotatably held for example by means of a bearing and a worm gearbox, such that the worm gear moves the spindles up or down in relation to the surroundings depending on the rotational direction of the worm gear thereby moving the loudspeaker and the acoustic lens between the first and second positions.
- 20 4. Loudspeaker assembly according to claim 1 or 2 c h a r a c t e r i s e d in that the means for moving the loudspeaker and/or the acoustical lens comprises one or more rails fastened to the surroundings, and that means are provided on the loudspeaker assembly for sliding along said rails, such that the loudspeaker assembly may be  
25 moved between the first and second positions.
5. Loudspeaker assembly according to claim 1 or 2 c h a r a c t e r i s e d in that the means for moving the loudspeaker and/or the acoustical lens comprises one or more moving racks optionally flexible racks fastened to the loudspeaker with corresponding  
30 gearwheels, such that by rotating the gearwheels the rack(s) and thereby the loudspeaker will move.

6. Loudspeaker assembly according to any preceding claim characterised in that the assembly is arranged in a vehicle, preferably in the dashboard, and/or doors, and/or the rear shelf.

5

7. Loudspeaker assembly according to any of claims 1 to 6 characterised in that the surroundings is the dashboard of a vehicle, and that the closure member is integral with a top section of the loudspeaker assembly and that the closure member is a cut-out section of the dashboard or at least made from the same materials and having identical texture as the dashboard, such that the assembly is invisible in its first position and fully operational in its second position.

10

8. Loudspeaker assembly according to one or more of claims 1 to 7 characterised in that the assembly is built into a wall, for example the wall of a vehicle door, the wall of a building, or the like, and that the closure member is a moveable section of the wall, which when the movement of the loudspeaker assembly is activated retracts, slides, pivots or in any other way moves concurrently with the movement of the loudspeaker assembly from the first position to the second position and vice-versa.

15

9. Loudspeaker assembly according to any preceding claim characterised in that the surroundings are a television set, a hi-fi sound installation, or another loudspeaker or subwoofer.

20

10. Loudspeaker assembly according to any preceding claim characterised in that pressure sensors are provided in the assembly such that if a predetermined minimum force is applied to the assembly in its second position the assembly will retract to its first position.

25

11. Loudspeaker assembly according to any preceding claim characterised in that the loudspeaker and/or the acoustic lens may be rotated around the axis of movement, and further may optionally be tilted around a second axis perpendicular to the axis of movement.

30

12. Automotive sound installation comprising a number of loudspeakers such as tweeters, midrange, bass, mid-bass and subwoofer and at least one loudspeaker assembly according to any of the preceding claims, c h a r a c t e r i s e d in that the sound distribution is controlled by a central unit, and that means are provided for optimising the distribution of sound between the loudspeakers in relation to the passengers in the vehicle, wherein the loudspeaker assembly is arranged in the dashboard of the vehicle, and that the loudspeaker assembly may automatically and optionally independently be adjusted for rotation, tilt and/or elevation for optimal sound distribution.